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Jerry D. Olds  
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PO Box 146300  
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Dear Mr. Olds,

At least since the 1950s and probably much earlier, folks have realized that more water was being taken out of the ground in the Beryl-Enterprise area than was being replenished. However, the State of Utah continued to issue new water rights into the 1960s.

According to the literature the Division posted on their web site, notably a paper from the late 1970s, the lower limit of water storage is at about 500 feet in an area north and northwest of Enterprise and up to 1000' in other areas. Since not all of the basin fill contains water and not all of the water can be accessed, the 1970s paper gave an estimate that there was 72 million acre feet of water storage. A great many numbers have been tossed about so I'll pick a new one and guesstimate that the amount of storage has been reduced by at least a net of 40,000 acre feet per year since 1978, perhaps 1.2 million acre feet, so there might be a bit less than 71 million acre feet of water left in the basin. At the rate of withdrawal mentioned at the August meeting in Enterprise, it would be a bit over 2000 years before my distant descendants hear that funny sucking sound at the end of the straw.

2000 years strikes me as a considerable length of sustained yield. However, not being a hydrologist, I'm guessing that not all the water can be recovered or is suitable for use. 50% sounds reasonable. Lets say the usage doubles, now we are down to a measley 500 years of sustained yield. That still sounds like the division of water rights knew what it was doing back in the 1950s and 1960s when it continued registering all those water rights.

Thus it seems apparent that the state is not really talking about "safe" or "sustained" yield but rather static yield: withdrawing only as much as is being replaced. That's a fine idea for a finite retirement account but not necessary for an account with enough for hundreds of years.

Having read a bit of history I'd be willing to wager that the climate will vary between now and 2507, so there will be more or less precipitation and farmers might be planting crops we've never ever heard of today. However, 500 years gives a nice cushion so someone else can deal with those situations.

Having also read all of the links on the division site, I suspect there is no certitude to any number given and everyone is offering their best good faith estimate. My point in using numbers is that the storage has been reduced since the 1920s and there are still many, many years of storage left.

The current problem is not a shortage of water, it's that the people who were granted water rights in a particular area are using them. The particular area is relatively small, about 10% of the Beryl-Escalante basin where almost 90% of the water is being used. From the chart the division

displayed on August 6th it would appear that the vast majority of the basin is not being over mined and 80 or 90% of the area's water table is not in serious decline. Other areas of the management plan aren't even included in the studies and have no well data to demonstrate any problem.

For that reason, the choice of the management boundaries seems both too large, too small, and too little studied. Destroying the livelihood of a rancher or someone's retirement home when they are 20 miles distant from the heavy pumping area seems capricious. At the same time, having the boundaries not include the mountain areas south of NewCastle and Enterprise risks later problems. Some of those in attendance at the August 6th meeting were concerned about developers and the dreaded golf course, and such an event could happen. Someone could discover a mountain valley that cries for a nice ornamental lake, a golf course, and perhaps an ATV park, and such a development outside of the management area could impact the amount of recharge.

While water quality would be a serious concern, it would seem that the quality in the heavily pumped area is still acceptable for domestic and agricultural use. One presumes that the residential users in that area, since their major livelihood is agriculture, will not object too strenuously if it ever comes to the point that they need to filter their drinking water.

Although it is heartwarming to have the legislature looking out for the best interests of the citizenry, the people who have the most at stake in the Beryl-Enterprise area are the people who are using their water rights. I think it unlikely that they would want to have their ggggggggrandchildren pump out the last drop of water before filing for bankruptcy. In fact, from the figures on crops presented at the August 6th meeting, one might presume that wise farmers have calculated that they can raise alfalfa for the next few decades while gradually making the expensive shift in implements in order to raise corn or other crops. The division's data indicated that the entire problem could be solved "merely" by switching to less thirsty crops in just the heavy pumping area.

If indeed there are still about 70 million acre feet of water stored in the basin, there is an adequate window of opportunity to gradually reduce use without destroying the local economy. Considering the five approaches mentioned at the meeting I would think that a combination of several would meet the objectives.

From approach #1, there should be no action for a set period of time. From approach #4, since residential use is an almost insignificant part of the equation and since a household (supposedly) uses .45 feet per year, perhaps 1/5 as much as alfalfa, conversion to residential use should be encouraged and residential users should be assured that they will not be cut off due to priority dates. (I would presume that residents cast more votes than alfalfa fields.) Perhaps I should suggest that the residential use should be low density, at least 1/2 acre lots and preferably larger and perhaps trade offs should be considered. If someone wants to convert an alfalfa field to, say, a mobile home park and it is calculated that the mobile home park (or other development) is calculated to use less water, then such a conversion would be allowed. This would be a parallel of the conversion to lower water demand crops. From approach #5, reduce the duty and gradually cut water use in the heavy pumping areas while the conversion is made to other crops over a horizon which considers the economics. As to compensation, perhaps that could best be accomplished by the state making interest free loans to the farmers to retire their alfalfa implements and purchase the equipment needed for replacement crops.

As to the amount that the water use should be cut back, the persons most affected should be the voices most heard. They can voluntarily agree to reduce use in the area most affected and some should be able to move part of

their operations to other areas in the basin where the water levels have showed little decline.

I am not a rancher. My soon-approaching retirement home is in a recharge area several miles from the nearest alfalfa field and I have no reason to think the water level in our community well is declining. I have a fairly early priority date (1943) and cannot believe that there is the political will to deny subdivisions, incorporated towns, the US government, and hundreds of other residents their water rights due to priority dates, especially considering that 90% of the basin does not have a serious problem. It would be a travesty to deny water use to a person with an later priority date when that person might be in a area where the water level is actually rising.

Many of us believe that the timing of the management plan has more to do with thirsty Las Vegas than with our local water quality. The papers on the Division's web site show that there was concern about over pumping in the 1930s and I know I've listened to the the discussion for over 30 years. Only now, when Las Vegas is buying water rights in Panaca does the legislature take action. The little blue arrows in a couple of the publications show that water is believed to flow north and southeast out of the Beryl-Escalante basin, so Utah water might be flowing toward Las Vegas in the future. Perhaps the legislature believes that we can achieve a static level and any further decline would be attributable to wells in Nevada. We could destroy our local economy in order to stave off the unstaveable. Looking from that point, perhaps over pumping... pumping all the rights that the state has issued... is actually in our best interests. If some of the alfalfa farms could be relocated west of Modena...there is a small area that might be suitable...and Utah pumps worked overtime, perhaps we could keep our water or even draw some Nevadas water into our funnel. That has a better chance of working than trying to make Nevada feel remose about taking water from our side.

In conclusion, there are minor problems with the boundaries of the management area and deficiencies in the studies especially at the margins of the area. When the area is considered as a whole it is grossly unfair to penalize persons who are using little water far from the problem at the same time it is unfair to hastily limit the livelihood of persons who are using the water rights the state issued when there is believed to be plentiful underground water for many years to come. I would suspect that the persons closest to this decision, the Escalante Water Users, have made careful calculations, since their livelihood depends on them, and their suggestion of a 40 year horizon is reasonable.

The bottom line is that there should be a wide margin of safety giving the area plenty of time to adjust. Las Vegas is being given dire warnings with two and three year predictions but Beryl-Escalante should have decades. If we use the management plan to walk carefully into the future, gradually reducing and preparing to reduce water use, then if it is discovered that harsher steps are needed the people at risk will have been warned and should be prepared. The state engineer and the legislature are to be commended for their foresight of proposing a management plan now, seemingly decades before harsh steps should be required.

Sincerely,

Keith Evans